

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

FILE

generic

and the

HAWAII INSTITUTE OF TROPICAL AGRICULTURE AND HUMAN RESOURCES
UNIVERSITY OF HAWAII
HONOLULU, HAWAII

NOTICE OF RELEASE OF 'TROPIC SUN' SUNN HEMP

The United States Department of Agriculture, Soil Conservation Service, and the Hawaii Institute of Tropical Agriculture and Human Resources, University of Hawaii, announce the release of 'Tropic Sun' sunn hemp, Crotalaria juncea L. 'Tropic Sun' is the first cultivar of this species to be released in the United States.

The original seed of 'Tropic Sun' was purchased in 1958 from a farmer on Kauai who grew it for a cover crop. No other information is available as to origin. In the past, the Pineapple Research Institute did considerable work with Crotalaria spp. and this strain may have been brought in by that organization. It was assigned the number P-15576 and HA-6.

'Tropic Sun' sunn hemp is an erect, branching annual legume. It is a rapid, vigorous grower, achieving a height of over 1.2 m in 60 days when grown under favorable conditions. The simple, elliptical leaves are 6 to 12 cm long by 1.5 to 3 cm wide. From 18 to 20 bright yellow flowers develop on terminal racemes. The papery, inflated seed pods are cylindrical in shape, 3 to 5 cm long by 1 to 2 cm wide. Seed germination is high with no hard seed. Seed yields of over 2,500 kg/ha have been obtained. 'Tropic Sun' is nontoxic. It is resistant to root-knot nematodes, Meloidogyne spp. Plants have not been adversely affected by diseases or insects.

The principal use of 'Tropic Sun' will be for soil improvement as a green manure crop. It is an excellent, rapid-growing green manure to be included in rotation with vegetable, flower, and other crops to add nitrogen and organic matter, to suppress weeds, and to reduce root-knot nematodes.

'Tropic Sun' is adapted year round in Hawaii below 300 m elevation and in summer below 600 m. It is not recommended above 600 m. It grows best on well-drained soils. It is adapted to soils ranging from coarse to fine textured. It is tolerant to alkalinity and acidity, but growth may be reduced below pH of 5.

Breeder and foundation seed of 'Tropic Sun' will be maintained by the Soil Conservation Service's Plant Materials Center, Hoolehewa, Molokai, Hawaii. Seed will be available to the public in 1982 through the University of Hawaii's Seed Distribution Program.

AD *11/1/82*
Thomas N. Shiflet, Director
Ecological Sciences
Technology Development and Application
Soil Conservation Service, USDA
Washington, D.C.

7/9/82

Date

h *C. H. Lum*
Francis C. H. Lum, State Conservationist
Soil Conservation Service, USDA
Honolulu, Hawaii

6/7/82

Date

O. P. Kefferd
Noel P. Kefferd, Director
Hawaii Institute of Tropical Agriculture
and Human Resources
University of Hawaii
Honolulu, Hawaii

5/21/82

Date